

A taxonomic study of the genus *Mimopydna* Matsumura, 1924 in China (Lepidoptera: Notodontidae)

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Abstract: This paper deals with 4 species of *Mimopydna* Matsumura, 1924 from China. *M. cuspidata* Wu et Fang is described as new to science. *M. sikkima stueningi* Schintlmeister is synonymized with *M. sikkima sikkima* (Moore). The male and female genitalia are illustrated. A key to the Chinese species is provided.

Key words: Lepidoptera; Notodontidae; *Mimopydna*; new species; China

The genus *Mimopydna* Matsumura, 1924 contains 11 species, all of which occur in Asia. The distributional range of the genus includes Japan, China, Nepal, Sikkim, India, Vietnam and Myanmar. The genus is characterized by the posterior margin of the male 8th sternite bearing a pair of stout spines.

Cai (1979) described 2 species of *Mimopydna* in China. Schintlmeister (1989, 1992) reported 3 Chinese species. This paper deals with 4 species from China, including one new species. *M. sikkima stueningi* Schintlmeister is synonymized with *M. sikkima sikkima* (Moore). The male and female genitalia are illustrated. A key to the Chinese species is provided.

The type specimens are deposited in the Institute of Zoology, the Chinese Academy of Sciences, Beijing, China.

Genus *Mimopydna* Matsumura, 1924

Mimopydna Matsumura, 1924, *Trans. Sapporo Nat. Hist. Soc.*, 9(1): 37.

Type-species: *Pydna pallida* Butler, 1877, by original designation (but cited as “*pallida* Walker”, an incorrect authorship)

Key to the Chinese species based on male genitalia

1. Sacculus without any process, margin smooth 2
Sacculus with dentate processes or margin serrate 3
2. Eighth sternite with short spines *M. sikkima kishidai*
Eighth sternite with long spines *M. sikkima sikkima*
3. Sacculus with big dents asymmetrical in both valvae
..... *M. anaemica*

- Sacculus with small dents symmetrical in both valva 5
4. Apical part of uncus wide; sacculus narrow *M. insignis*
Apical part of uncus narrow; sacculus wide *M. cuspidate*

Mimopydna anaemica (Leech, 1898) (Fig. 1)

Pydna anaemica Kiriakoff, 1962, *Bonn. Zool. Beitr.*, 13: 230.

Besaia (*Mimopydna*) *anaemica*: Schintlmeister, 1992: 67.

Mimopydna insignis: Cai, 1979: 89. [misidentification]

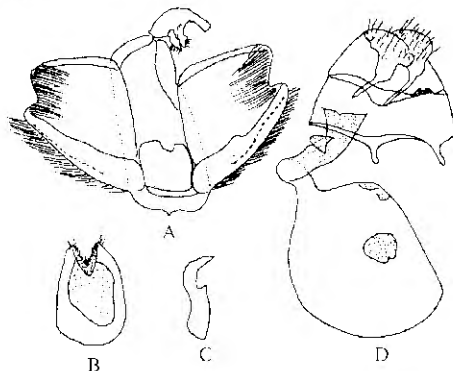


Fig. 1 *Mimopydna anaemica* (Leech)

- A. male genitalia; B. male 8th sternite;
C. aedeagus; D. female genitalia

Specimens examined: Zhejiang: Fuyang Co., 1 ♂ 1 ♀, 1977. V. 24, Hangzhou City, 1 ♀, 1975. VI. 6, Yuhang Co., 3 ♂ 1 ♀, 1974. VII. 4; Jiangxi: Mt. Lushan, 1 ♀, 1974. VI. 17, Yifeng Co., 1 ♂, 1959. VIII. 29; Hunan: Mt. Hengshan, 3 ♀, 1974. V. 29, Yiyang Co., 1 ♀, 1965. VIII, Guzhang Co. (850 m), 1 ♀, 1988. VII. 29; Fujian: Mt. Wuyi, 3 ♀, 1983. VI. 5 – VIII. 8, Jianyang Co. (900 – 950 m), 1 ♂, 1960. VI. 3; Yunnan: Pingbian Co. (1 500

m), 1 ♀, 1956.VI.19.

Host plant: *Phyllostachys pubescens* Mazel ex H. de Lehaie

Distribution: Zhejiang, Jiangxi, Fujian, Hunan, Yunnan; Vietnam.

***Mimopydna insignis* (Leech, 1898) (Fig.2)**

Pydna insignis Leech, 1898, *Trans. Ent. Soc. Lond.*, p. 301.

Besaia (*Mimopydna*) *insignis*: Schintlmeister, 1992: 67.

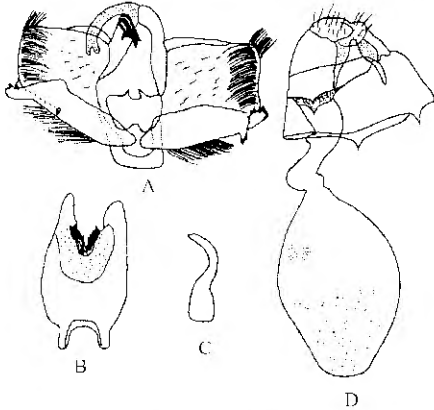


Fig.2 *Mimopydna insignis* (Leech)

A. male genitalia; B. male 8th sternite;

C. aedeagus; D. female genitalia

Specimens examined: Sichuan: Mount Emei (800 ~ 1 000 m), 2 ♂♂, 1957.IV. 29, Yingjing Co., 1 ♀, 1984.VI.24.

Distribution: Hubei, Sichuan.

***Mimopydna sikkima sikkima* (Moore, 1879) (Fig.3)**

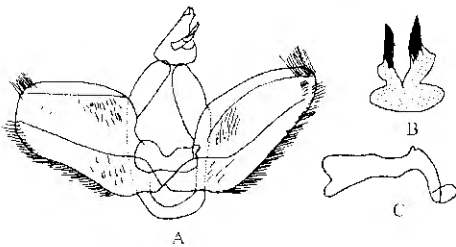


Fig.3 *Mimopydna sikkima sikkima* (Moore)

A. male genitalia; B. 8th sternite; C. aedeagus

Niganda sikkima Moore, 1879, *Descr. Lep. Atkins.*, p. 64.

Mimopydna sikkima: Kiriakoff, 1968: 90; Cai, 1979: 90.

Besaia (*Minopydna*) *sikkima sikkima*: Schintlmeister, 1992: 65.

Besaia (*Minopydna*) *sikkima stueningi* Schintlmeister, 1989, *Neue Ent. Nachr.* 25: 106; 1992: 66. **Syn. n.**

In the type specimens (India), the gnathos is wider and

slightly pointed, with a small process in the middle; aedeagus lacks a process. In the specimens from Yunnan, the lateral process of aedeagus varied from being absent to developed.

Specimens examined: Yunnan: Yongsheng Co. (2 250 m), 1 ♂, 1984.VII.6, Dongchuan Dist. (2 800 m), 1 ♂, 1980.VI. 29; Guangxi: Mt. Miaoershan (1 900 m), 3 ♂♂, 1985.VII.14.

Distribution: Guangxi, Yunnan, Shaanxi; Nepal, Sikkim, Myanmar, Vietnam.

Remarks: According to the structure of the male genitalia, Schintlmeister (1989, 1992) divided this species into 3 subspecies worldwide, including 2 new subspecies from China (Shaanxi and Taiwan). According to the original description of Schintlmeister, subsp. *stueningi* Schintlmeister differs from the nominate subspecies in the gnathos lacking a process and the aedeagus having a lateral process. He recorded the nominate subspecies from Yunnan (Lijiang) in China, and ssp. *stueningi* Schintlmeister from Shaanxi (Mt. Taibaishan). However, we found that the gnathos of the specimens from Yunnan (Yongsheng near Lijiang, Dongcuan) and Guangxi bears a very small process and the aedeagus laterally bears a process. Because both the median process of the gnathos and the lateral process of aedeagus varied from being absent to developed, the diagnosis between ssp. *stueningi* Schintlmeister and the nominate subspecies consequently disappeared. Therefore, ssp. *stueningi* Schintlmeister should be synonymized with the nominate subspecies.

***Minopydna sikkima kishidai* Schintlmeister, 1989**

Besaia (*Minopydna*) *sikkima kishidai* Schintlmeister, 1989, *Neue Ent. Nachr.* 25: 106; 1992: 66.

This subspecies differs from the nominate subspecies by having an 8th sternite with a shorter processes.

Distribution: China (Taiwan).

***Minopydna cuspidata* Wu et Fang, sp. nov. (Fig.4)**

♂ Wing expanse 48mm. Head and thorax grayish yellow, abdomen yellowish brown. Labial palpus yellowish brown. Shaft of antenna grayish white, pectens yellowish brown. Forewing tobacco yellow, dorsal area pale reddish brown; pattern indistinct, pale reddish brown: a band from discal vein to termen; outer fascia double, serrate, 2 rows of grayish red – brown dots at outside; subterminal fascia formed by a row of dark reddish brown spots; terminal fascia marked by reddish brown dots. Hindwing dark yellowish brown.

Male genitalia: 8th sternite narrow, posterior margin concave in V-shape, with 2 stout spines; uncus relative short, apex pointed; gnathos long, with small spines at middle, apex pointed; valva elliptic, sacculus wide, with a row of spines in outer margin; aedeagus curved.

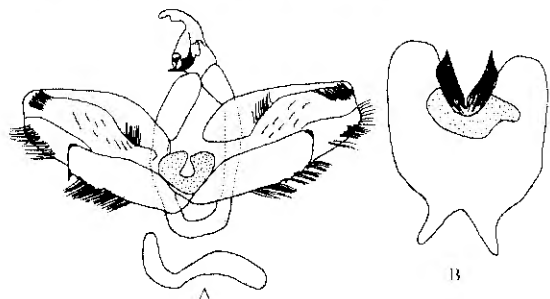


Fig. 4 *Besaia* (*Minopydna*) *cuspidata*

Wu et Fang, sp. nov.

A. male genitalia; B. 8th sternite; C. adult

Holotype ♂: Shaanxi: Ningshan (1 350 m), 1998. VII. 29.

Paratype: 1 ♂, Gansu: Kangxian Co. (1 450 m), 1998. VII. 15.

Distribution: Shaanxi, Gansu.

Etymology: The name was derived from Latin “cuspidatus” (= pointed), corresponding to the pointed uncus in the male genitalia.

Diagnosis: This new species is related to *B. (M.) sikkima* (Moore), but differs from the latter by the following characters: the forewing has an indistinct pattern; in the male genitalia, uncus not forked apically, and sacculus broad with spines.

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中国拟皮舟蛾属分类研究

(鳞翅目: 舟蛾科)

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摘要: 系统整理了中国拟皮舟蛾属 (*Minopydna* Matsumura, 1924) 的全部种类, 共 4 种, 包括 1 新种: 尖拟皮舟蛾 *Minopydna cuspidata* Wu et Fang, sp. nov., 并将黄拟皮舟蛾秦岭亚种 *M. sikkima stueningi* Schintlmeister 作为指名亚种 *Minopydna sikkima sikkima* (Moore) 的异名处理。文中提供分种检索表, 新种形态描述和外生殖器特征图, 模式标本保存在中国科学院动物研究所动物标本馆。

关键词: 鳞翅目; 舟蛾科; 拟皮舟蛾属; 新种; 中国

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